

INDIA'S TOTAL SANITATION CAMPAIGN : IS IT ON THE RIGHT TRACK? PROGRESS AND ISSUES OF TSC IN ANDHRA PRADESH

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ABSTRACT

The Total Sanitation Campaign (TSC) is the flagship sanitation programme of Government of India to reach the Millennium Development Goals. But this programme has not yet achieved its set targets. This paper raises some key research questions like will India and Andhra Pradesh achieve the Millennium Development Goal of Sanitation? Are the TSC targets realistic? What is the coverage and usage status of the sanitation facilities? etc. Analysis of field data reveals that Andhra Pradesh has achieved a coverage status of 60 per cent but the usage of toilets by households is alarmingly low. The major challenges include insufficient fund allocations as compared to water, lack of effective strategies for demand creation, no or low expenditure on the IEC components etc. For taking the TSC in a mission mode there is an immediate need to restructure and strengthen the Village Water and Sanitation Committees (VWSCs) and the Panchayats by decentralising powers and finances. The Government should focus on public-private partnerships that can accelerate solutions and enhance service provision. Proper steps are to be taken for demand generation through mass awareness campaigns using the local media, mobile networks and creative advertisements, keeping the principles of human dignity, quality of life, shame and fame and finally the environmental safety at household and community level as central focus. Demand generation, capacity building and IEC strategies have to become the integral part of the system using the Non- Government Organisations (NGOs) or local resource persons or centres. Further, massive programmes like TSC require intense community support and involvement, hence building community vision beyond construction is essential to sustain the sanitation behaviour change.

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Introduction

Sanitation is vital for human health and it is one of the important indicators that reflect the quality of life of the people. It is a basic necessity that affects everyone's life and is a yard stick of socio-cultural and economic development of a nation.

Over one billion people worldwide have gained access to improved sanitation in the past 14 years, with the global sanitation coverage having increased from 49 to 59 per cent between 1990 and 2004 (UNICEF, 2008a). Yet, the world continues to be off the track to meet the Millennium Development Goal (MDG) to reduce by half the proportion of people without access to basic sanitation by 2015. India stands second amongst the worst places in the world for sanitation. The severity of the problem in India could be judged from the fact that hardly 33 per cent of overall population has sanitation facility available. A mere 14 per cent of people in rural areas of the country had access to toilets in 1990, the proportion had gone up to 28 per cent in 2006. Interestingly, the coverage is 59 per cent in urban areas (WHO/Unicef, 2004). In rural areas of India, 74 per cent of the population still defecate in the open and the latest survey reveals that it has decreased to 65 per cent which is still low (NSSO, 2008). Developing countries like India, where the cash income is very low and the idea of building a facility for defecation in or near the house may not seem natural. And where facilities exist, they are often inadequate. India is losing billions of dollars each year because of poor sanitation. Illnesses are costly to families, and to the economy as a whole in terms of productivity losses and expenditure on medicines, health care, and funerals (United Nations, 2008). According to Hutton and Bartram (2008), it is estimated that about US\$ 42 billion for water and US\$ 142 billion for sanitation, a combined annual equivalent of US\$ 18 billion is required to meet the MDG target worldwide. The cost

of maintaining existing services totals an additional US\$ 322 billion for water supply and US \$216 billion for sanitation, a combined annual equivalent of US\$ 54 billion.

Given these hard realities Government of India remains committed to making India open defecation-free by 2012 (MoHRD, 2002). Such a strong commitment of the Government can be witnessed through India's TSC programme with an outlay of ₹ 120 billion, which is one of the largest sanitation programmes in the world. Keeping this background in view, this paper has tried to address some of the key research questions such as 1) what is the sanitation coverage across India and in Andhra Pradesh? 2) is sanitation getting enough attention in budgets and in project implementation? 3) are the Central and State Governments able to reach the set targets of TSC and Millennium Development Goals? 4) what are the constraints and issues in implementation of Total Sanitation Campaign etc.

Methodology

This paper is based on the secondary data collected from online TSC monitoring website and the data collected from Department of Drinking Water Supply (DDWS) both from Gol and Andhra Pradesh. Further, the Government of India and Government of Andhra Pradesh budget documents were used to assess the allocations made specifically for sanitation. Further, the field data from WASHCost study are presented wherever appropriate to support the analysis. The analysis is focused both at National (India) and State levels (especially for Andhra Pradesh).

History of Sanitation Initiatives : Water supply and sanitation is a state responsibility under the Indian Constitution. The first Five Year Plan had allocated very negligible investments to sanitation while the Sixth Plan had considerable amount due to the launch

of International Drinking Water Supply and Sanitation Decade in 1980. The Ministry of Urban Development (MoUD) was the nodal agency for water and sanitation sector at the beginning of the Seventh Plan. Subsequently, Rural Water Supply and Sanitation is transferred to the Department of Rural Development (DRD). Rural water supply was an important constituent of the State sector during the Seventh Plan. In 1986, the National Drinking Water Mission (NDWM), popularly known as the "Technology Mission" was launched in order to provide scientific and cost-effective content to the Centrally sponsored Accelerated Rural Water Supply Programme (ARWSP). Later in 1986, it was decided that a portion of the funds, made available under the rural employment programme and the Indira Awaas Yojana, to be utilised for rural sanitation. Rural sanitation programme was also added to the State sector MNP (Minimum Needs Programme) from 1987-88. In November 1986, a new Centrally Sponsored Rural Sanitation Programme (CRSP) was launched. The CRSP relied on providing the hardware subsidies and did not focus on other aspects resulting in just 1 per cent increase of rural sanitation. The 2001 census revealed only 22 per cent of the households had access to a toilet with an investment of over 6 billion to construct 9 million toilets. Recognising the limitations of this approach, the Total Sanitation Campaign was launched in 1999. According to guidelines, the TSC moves away from the infrastructure focused approach of earlier programmes and concentrates on promoting behaviour change. In addition, it includes a fiscal incentive scheme, Nirmal Gram Puraskar that promotes the role of Gram Panchayat and local communities in achieving community-wide total sanitation status.

Total Sanitation Campaign (TSC) : The Central Rural Sanitation Programme (CRSP), launched in 1986 and revised in 1992, was a

traditional, supply-driven subsidy-oriented programme. In April 1999, CRSP was restructured and launched as the Total Sanitation Campaign (TSC) making it 'people oriented' and 'demand driven'. TSC projects have been sanctioned in 593 rural districts of the country with a total outlay of ₹. 17,885 crore with a Central share of ₹. 11,094 crore. TSC lays strong emphasis on Information, Education and Communication (IEC), Capacity Building and Hygiene Education for effective behaviour change with involvement of Panchayat Raj Institutions (PRIs), Community Based Organisations (CBOs), and Non-governmental organisations (NGOs), etc. The key intervention areas are Individual Household Latrines (IHHL), School Sanitation and Hygiene Education (SSHE), Community Sanitary Complex, Anganwadi toilets supported by Rural Sanitary Marts (RSMs) and Production Centres (PCs).

Although the concept of sanitation has undergone qualitative changes over the years, there has been slow progress in the sanitary conditions compared to rural water supply. To combat this, State Water and Sanitation Missions (SWSM) were established as per Government of India (GoI) guidelines to have mission mode approach with an objective to cover problem villages, improve performance and cost-effectiveness of ongoing programme.

RESULTS AND DISCUSSION

Analysis of the secondary data reveals that TSC has helped in changing the momentum of sanitation but unable to reach the expected targets. Detailed findings are discussed under the following sub-headings.

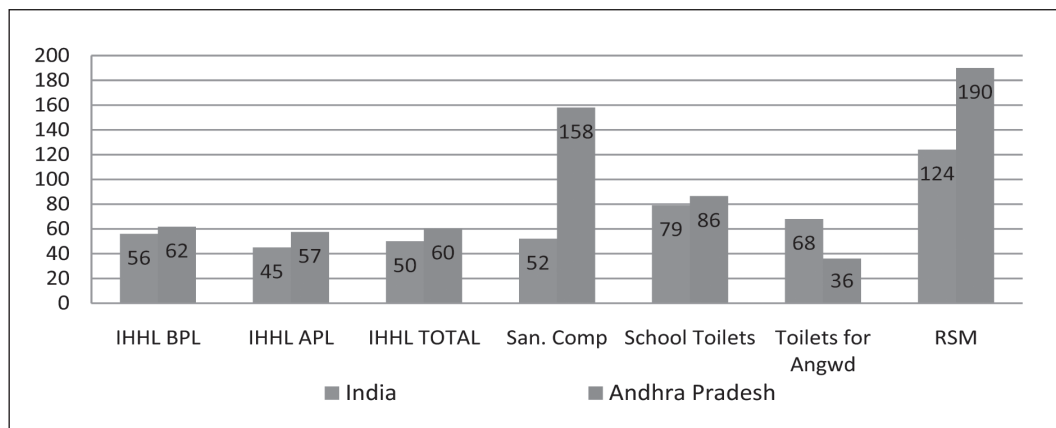
Status of Coverage of Physical Targets under TSC Programme

The TSC programme had a herculean task of providing access to the toilets in the rural

areas and accordingly the targets have been fixed to reach every household by 2012. Despite the full decade of continuous efforts and incentives, the achievement percentage is quite discouraging especially looking at the

target ahead. The physical target for Eleventh Plan is to cover 69 million households with IHHLs, 25769 sanitary complexes, 1,33,114 anganwadis and all the remaining schools to be provided with safe sanitation facilities.

Fig. 1: Sanitation – Component-wise Physical Targets and Achievements (2001 to 2010)



Source : www.ddws.nic.in dt: 01:01:2010.

It could be seen from Fig.1 that the targets reached in the last 10 years is below 56 per cent in IHHL for BPL though it is 79 per cent in school toilets and 68 per cent in Anganwadi toilets for all India, while the achievement per cent for Andhra Pradesh is 62. If we look at the target of TSC which is expected to reach the balance target (38 per cent) to be achieved in just two years (i.e by 2012) seems to be almost impossible with the existing institutional arrangements and the approach followed to reach the rural households. At the all India level only Rural Sanitary Marts target has crossed 124 per cent and in Andhra Pradesh sanitation components and Rural Sanitary Marts have reached targets of 158 and 190 per cent, respectively which seems to be unbelievable given the IHHL coverage.

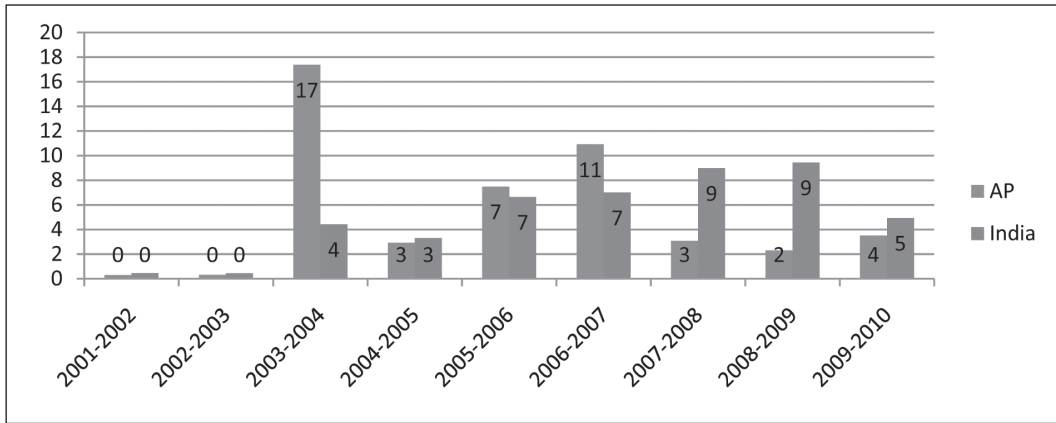
It could be seen from Fig. 2 that there was good progress between 2003 and 2004 in terms of coverage providing the hardware.

But it could be noticed that progress in the last two years is declining, indicating the low priority given to sanitation. Further, it is evident from the graph that though the percentage is little high in case of Andhra Pradesh, the overall performance is similar to that of India. This could have made the Government focus more on the start up and IEC activities but the achievement percentage for the last three years (2006 - 2009) towards sanitation brings back the question "are the MDGs a myth"? Or "are the TSC goals realistic?" The hard realities of reaching 40 per cent of households with sanitation facilities in just two years with the given institutional arrangements is not only difficult but unrealistic.

Financial Targets and Achievements of TSC Programme

The total project outlay for the TSC is more than ₹ 12,580 million, out of this Gol share is 783 million, State's share is 2861

Fig. 2 : Year-wise Physical Progress of Achievement in India and Andhra Pradesh

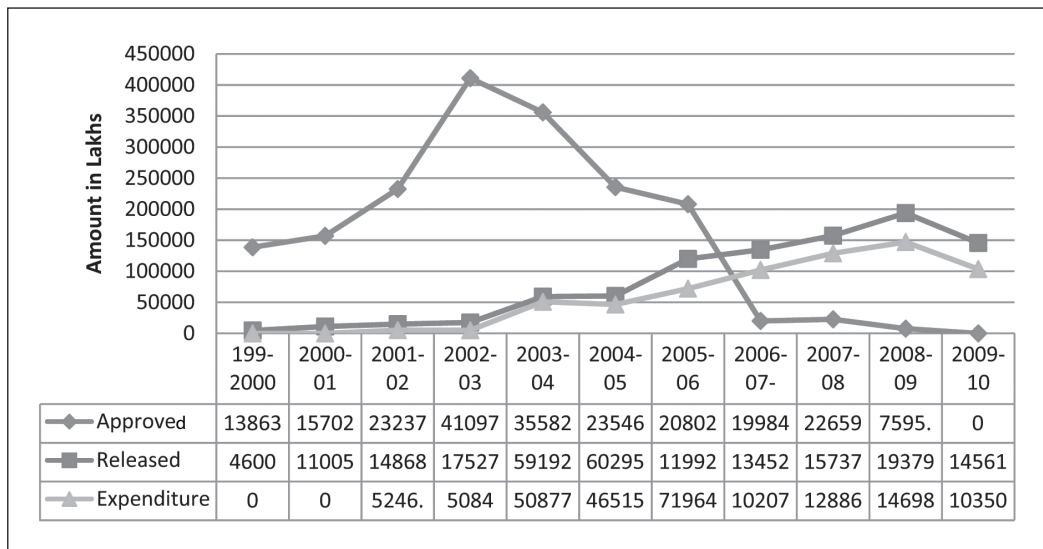


Source: www.ddws.nic.in dt: 01:01:2010.

millions and beneficiary share is 1920 million. It is projected that the full coverage of rural drinking water supply is to be achieved by March 2009 and 100 per cent sanitation coverage by the end of Eleventh Plan (2012) with mass awareness campaigns and Nirmal Gram Puraskar (Eleventh Planning Commission

Report, 2007-2012). The outlay proposed for Eleventh Plan is ₹ 7816 crore (₹ 6910 crore at 2006-07 prices). The allocation for AP in 2007 and 2008 is ₹1060 crore. The funds allocated for water and sanitation are meagre (4-8 per cent) compared to the budget allocations for other sectors (Reddy & Batchelor, 2009).

Fig. 3 : Year-wise Allocations and Expenditure on Sanitation in India



Source : www.ddws.nic.in dt: 01:01:2010.

Further, it could be seen from Fig.3 that the year-wise approvals for the last three years (2006 – 2009) were low and hence the allocations and expenditure. It needs to be noted that though the allocations were made to the states, they are not able to spend the amounts and reach the targets. The reasons could be improper planning and lack of efforts in demand creation, low or no staff members specifically dedicated to promote the sanitation activities.

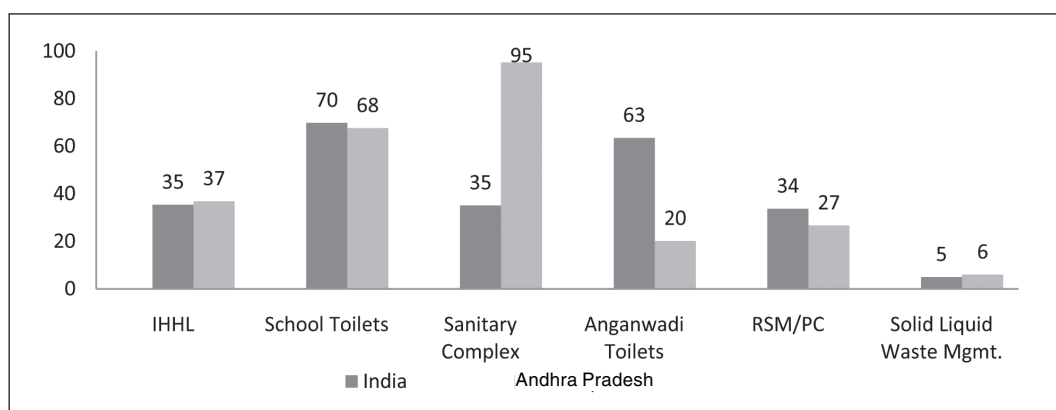
It could be seen from Fig.3 that, from 2006 onwards the approvals got declined from the Central budgets. While the budget releases declined for the fiscal year 2009-2010 and consequently the expenditure, causing concern to reach the full coverage of sanitation and subsequently the Millennium Development Goals.

Sanitation Component-wise Financial Progress

If we analyse the financial progress among the various sub-components of the Total Sanitation programme it clearly reveals that there is much more to achieve under each component.

Fig.4 reveals that except under the school sanitation and anganwadi toilets, the expenditure is below 35 per cent which is an alarming situation and it raises lot of concerns over the realistic nature of the targets set to achieve. Further, the reasons for the progress in school sanitation could be attributed to the fact that funds are released to the SSA (Sarva Siksha Abhiyan) programme of Education Department for construction of school toilets. They take up construction of school sanitary complexes as part of improving the school infrastructure and facilities. Further, non-provision of toilets within the school premises were causing school dropouts especially in case of girl children, hence the acceleration to complete toilet construction gained momentum. But field reality is that the toilets constructed are not being used by children, they are either locked or not being used due to lack of water and other cleanliness issues (Snehalatha et al., 2010). The percentage of achievement with respect to solid and liquid waste management is least both at India level (5 per cent) and in Andhra Pradesh level (6 per cent) indicating low importance given to the task. Further, the Panchayats are to be receiving the funds for undertaking activities

Fig. 4 : Component-wise Financial Progress (percentage) in Andhra Pradesh and India under TSC



Source : www.ddws.nic.in dt: 01:01:2010.

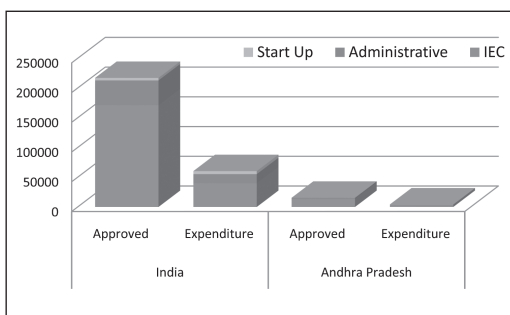
but the reality on the ground is that the Panchayats often do not receive funds, even if received, the priority is not given to using the funds for the intended purpose, hence the coverage is very low.

Expenditure on Soft Vs Hardware Component

Expenditure on soft components like Information, Communication and Education (IEC) activities is very important and it is one of the major shifts in policy through TSC. But the Figure below reveals that the expenditure incurred on this component is below the sanctioned amounts.

The expenditure pattern for software component (Fig. 5) reveals that a meagre or negligible amount has been spent on the IEC especially in case of Andhra Pradesh compared to India. The administrative costs booked are also less indicating the lack of staff working for sanitation. During the secondary data analysis for the State of Andhra Pradesh it is revealed that out of the sanctioned 5380 posts, 1742 posts are vacant which is around 25 per cent of the total staff (Source: Department of Rural Water Supply and Sanitation status note, 2009). The existing staff are stretching beyond their capacity to work without any incentives. It was revealed by some staff members that

Fig. 5 : Expenditure on Software Components of Sanitation

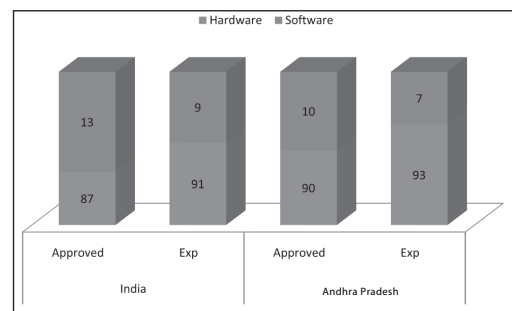


Source : www.ddws.nic.in dt: 01:01:2010.

they are working in five to eight divisions instead of one or two. Further, the IEC component which is crucial for the behavioural change of the rural households is given least priority leading to less demand for toilets. Role of Non-Governmental Organisations in demand generation activities is completely ignored.

Fig.6 reveals that the expenditure under hardware is more than approved both for India and Andhra Pradesh indicating the dominance of engineering bias towards only construction. But this is an incorrect approach of addressing the most sensitive problem of India where 74 per cent of rural population considers that open defecation is an accepted cultural norm.

Fig. 6 : Comparative Analysis of Percentage of Expenditure on Hardware and Software (2001-10)



Source : www.ddws.nic.in dt: 01:01:2010.

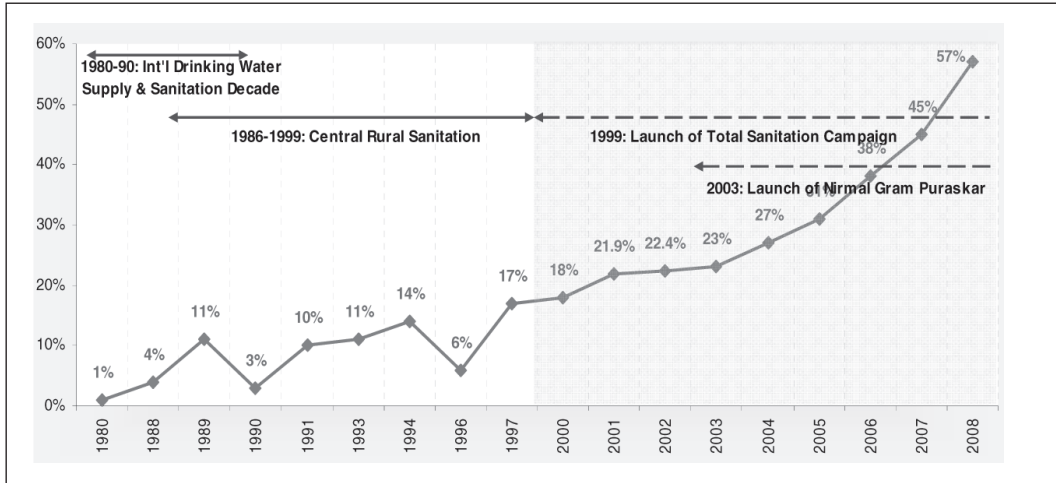
Are the Targets Realistic?

It can be noted that though the Government of India has initiated all the above programmes with new targets and dimensions each year, the coverage seems to be picking up at a very slower pace than anticipated. It could be noted from Figure 7 that after the launch of Total Sanitation Programme there is considerable improvement in terms of sanitation coverage levels mostly in rural areas. The coverage is about 57 per cent until year 2008. The baseline coverage was 21 per cent,

which means that it precisely took eight years to reach 57 per cent. Another 43 per cent is to be achieved in just three years i.e. by 2012, to

reach the Millennium Development Goals, which seems to be a highly difficult task given the scale of operation.

Fig. 7 : Rural Sanitation IHHL Coverage in India



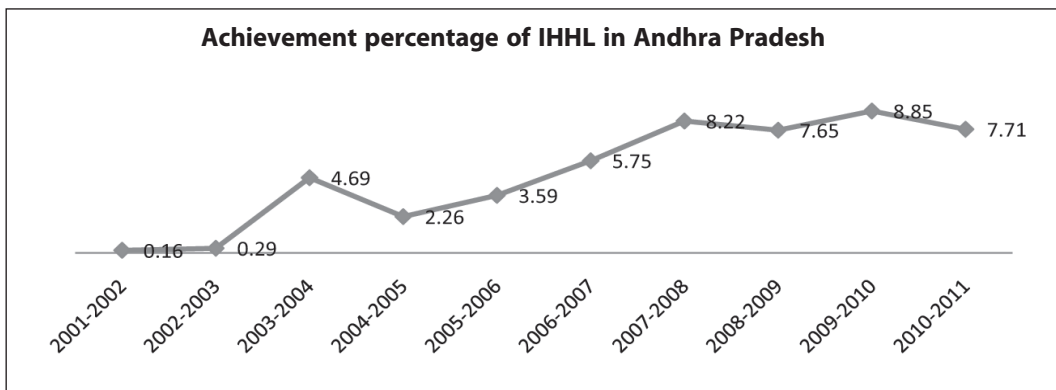
Source : Govt. of India, Dept. of Drinking Water Supply.

In the case of Andhra Pradesh also the year wise percentage of achievement is almost similar to that of all India figures causing concerns over the target that still needs to be achieved.

Coverage Vs Usage

As it is, coverage of households with toilets itself is an issue, but the usage of these toilets is another major challenge. A number

Fig. 8 : Year-wise progress of IHHL in Andhra Pradesh



Source : www.ddws.nic.in dt: 01:01:2010.

of studies pointed that though there is coverage, lots needs to be done to make these toilets used by the intended beneficiaries through awareness creation. Snehalatha and Reddy (2009) reported that though toilets are present in majority of households, they still defecate openly. Further, the school toilets are either used by teachers or under lock. Even the adolescent girls reported that they do not have access to the toilets even in a single school of the study area and have to urinate in

the open. The difficulty in changing the mindset of the people remains a major challenge for the successful implementation of the TSC programme. The main reasons for non-use of the constructed toilets under TSC are cultural and traditional beliefs, scarcity of water, lack of awareness on health benefits if using toilet, myths about filling of pit etc. Further, the box provided gives the reality on the ground.

BOX 1: Access to¹ and Usage² of Individual Sanitary Latrines (ISLs)

Surveys in sample villages (20) across two agro climatic zones at household level reveal that around 76 per cent of the households in NGP villages and 32 per cent of households in non-NGP villages have access to household toilet facilities. The higher access in NGP villages may be due to long-term efforts on sanitation promotion which is probably absent from non-NGP villages. Access levels vary across villages depending on household income, water availability, awareness, support from government schemes, etc. Despite the subsidy provided through the government programmes, sanitation is poor and requires intensive efforts from both Government and communities. Factors such as low awareness levels, lack of space to construct toilets, resistance to changing a traditional practice of open defecation, and non-affordability act as major constraints to gaining access to toilets (Snehalatha et al., 2010).

¹An individual sanitary toilet (ISL) is designed to provide safety, privacy and dignity and is usually located within the house premises.

²Usage means use of the toilet by all the family members at all times. This paper does not discuss in detail WASHCost data on hygiene behaviour in families.

Inter-State Performance in Achieving TSC Targets

The percentage of achievement of different components of sanitation i.e Individual Household Latrines (IHHLs), school toilets, anganwadi toilets and sanitary complex across the states in India is indicated in Table 1. It is observed that, Goa achieved 100 per cent target regarding IHHL, whereas Manipur and D&N Haveli were least in percentage of achievement. The performance of states like

Bihar (15.54 per cent), Rajasthan (11.6 per cent), Maharashtra (25.43 per cent) and Jammu & Kashmir (8.36 per cent) is low. States such as Sikkim (105.02 per cent), Gujarat (101.7 per cent), Mizoram (97.49 per cent), Kerala (98.27 per cent) and Haryana (98.24 per cent) were achieving good targets with respect to school toilets. At all India level, the achievement targets of IHHL (35.34 per cent) was much lesser as compared with the achievements of school toilets (69.75 per cent) and anganwadi (63.46 per cent).

Table 1: Component-wise Achievement in TSC Across the Different States (in per cent)

S. No.	State Name	IHHL	School	Anganwadi	Sanitary Complex
1	Andhra Pradesh	36.85	67.6	20.15	95.18
2	Arunachal Pradesh	12.67	82.07	46.16	7.12
3	Assam	11.85	58.51	26.14	2.22
4	Bihar	15.54	52.34	15.31	9.03
5	Chhattisgarh	32.51	91.49	75.92	29.82
6	D & N Haveli	0.36	0	0	6.67
7	Goa	10	1.68	18.37	9.1
8	Gujarat	47.77	101.7	87.6	82.02
9	Haryana	62.49	98.24	79.45	75.47
10	Himachal Pradesh	12.89	38.83	30.36	7.53
11	Jammu & Kashmir	8.36	46.55	7.51	9.96
12	Jharkhand	23.29	78.46	32.98	6.4
13	Karnataka	23.69	64.83	94.11	43.8
14	Kerala	84.85	98.27	67.29	58.15
15	Madhya Pradesh	32.9	73.65	78.03	42.93
16	Maharashtra	25.43	82.14	91.95	20.85
17	Manipur	3.52	27.59	79.79	18.95
18	Meghalaya	17.15	32.84	19.16	17.19
19	Mizoram	89.41	97.49	96.2	46.66
20	Nagaland	19.75	54.51	49.3	26.55
21	Orissa	21.74	68.65	41.99	2.84
22	Puducherry	7.33	0	100	0
23	Punjab	1.44	25.49	0	9.83
24	Rajasthan	11.6	59.48	36.81	16.66
25	Sikkim	344.5	105.02	117.65	58.56
26	Tamil Nadu	57.02	94.23	105.56	56.49
27	Tripura	83.49	71.07	82.32	109.31
28	Uttar Pradesh	69.94	83.8	73.36	97.28
29	Uttarakhand	22.85	41.96	13.7	2.09
30	West Bengal	53.44	47.36	30.13	29.46
	Grand Total	35.34	69.75	63.46	35.08

Source : www.ddws.nic.in dt: 01:01:2010.

Further, inter-state comparison is done by classifying the percentage of achievements into three categories such as below 50 per cent, 50-75 per cent and above 75 per cent as shown in Table 3 which indicate the forerunner states in terms of their progress towards total sanitation. It could be noticed

that when the performance across all the states on the IHHL progress is seen, more than 15 States are below 50 per cent of achievement and around 5 States are between 50-75 per cent of achievement. There are about 6 states which have achieved above 75 per cent.

Table 2: Categorisation of States Across the Sanitation Components

Achievement percentage	IHHL	Sanitary Complexes	School Toilets	Anganwadi Toilets
Below 50%	Andhra Pradesh, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, D & N Haveli, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Gujarat, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Nagaland, Orissa, Puducherry, Punjab, Rajasthan and Uttarakhand	Arunachal Pradesh, Assam, Bihar, Chhattisgarh, D & N Haveli, Jammu & Kashmir, Jharkhand, Karnataka, Manipur, Meghalaya, Nagaland, Orissa, Puducherry, Punjab, Rajasthan and Uttarakhand	Arunachal Pradesh, Assam, Bihar, Chhattisgarh, D & N Haveli, Goa, Himachal Pradesh, Jharkhand, Karnataka, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Orissa, Puducherry, Punjab, Rajasthan, Uttarakhand and West Bengal	D & N Haveli, Himachal Pradesh, Jammu & Kashmir, Manipur, Meghalaya, Nagaland, Puducherry and West Bengal
50-75%	Haryana, Tamil Nadu and West Bengal	Andhra Pradesh, Madhya Pradesh, Maharashtra and Uttar Pradesh	Jammu & Kashmir, Mizoram, Nagaland, and Tripura	Assam, Bihar, Goa, Rajasthan and Uttarakhand
Above 75%	Sikkim has the highest % of 344.5, followed by Goa, Kerala, Mizoram, Tripura and Uttar Pradesh	Goa, Gujarat, Haryana, Himachal Pradesh, Kerala, Mizoram, Sikkim, Tamil Nadu, Tripura and West Bengal	Andhra Pradesh, Gujarat, Haryana, Kerala, Sikkim, Tamil Nadu and Uttar Pradesh	Andhra Pradesh, Arunachal Pradesh, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Mizoram, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura and Uttar Pradesh

Source : ddws.nic.in

IHHL Coverage Status Across India: Under IHHL coverage across the different States in India, Arunachal Pradesh, Assam, Bihar, Chhattisgarh, D & N Haveli, Himachal Pradesh, Jammu & Kashmir, Jharkhand, Karnataka, Gujarat, Madhya Pradesh, Maharashtra, Manipur, Meghalaya, Nagaland, Orissa, Puducherry, Punjab, Rajasthan and Uttarakhand fall under the category of below 50 per cent of IHHL coverage. In the States of Haryana, Andhra Pradesh, Tamil Nadu and West Bengal, the coverage status is in between 50-75 per cent. Notable feature is that Sikkim has the highest percentage of IHHL coverage accounting to 344.5 per cent which implies the importance given for the IHHL in the mindsets of people and care for the health and environment, followed by Goa, Kerala, Mizoram, Tripura and Uttar Pradesh. Further, all these states are very small in geographical area except Uttar Pradesh, hence reaching the households to motivate on IHHL access and usage could be easy.

Sanitary Complexes Coverage Status Across India: Sixteen States have less than 50 per cent of coverage under the sanitary complexes component, which is a clear indication that focus is not given to this area. The poor who do not have enough space and money to construct toilets depend on these complexes and low coverage on this area would increase the number of households not having accessibility to toilets which makes MDGs much more difficult to achieve. Between 50 to 75 per cent of coverage is seen in Andhra Pradesh (67.6 per cent), Madhya Pradesh, Maharashtra and Uttar Pradesh implying the role played by the respective State Governments towards total sanitation. Ten States i.e Goa, Gujarat, Haryana, Himachal Pradesh, Kerala, Mizoram, Sikkim, Tamil Nadu, Tripura and West Bengal have a coverage of above 75 per cent which clearly puts forth the fact that these states are focusing more on sanitation coverage. The achievement could be attributed to the literacy levels and priority

given to the agenda by the state Governments etc. But as reported earlier, the coverage does not mean the usage and many studies (TARU (2008), have reported that despite access, household members are not using the toilets.

School Toilets Coverage Status Across India: Nineteen States fall under the category of below 50 per cent coverage. The reasons that can be attributed partly could be the disproportionate use of funds, diversion of funds to some other sector, lack of interest amongst the elected as well as the community members to build toilets in school premises etc. States of Jammu & Kashmir, Mizoram, Nagaland and Tripura have been pooled in the category of 50 to 75 per cent coverage, could be that these states have realised the need for the construction of school toilets. Andhra Pradesh, Gujarat, Haryana, Kerala, Sikkim, Tamil Nadu and Uttar Pradesh have more than 75 per cent of coverage of the school toilets. Reasons that can be attributed are State Governments involving Education Department for construction of toilets and also the massive drives combined with girl child education etc.

Anganwadi Toilets Coverage Status Across India: Eight States are categorised under below 50 per cent coverage. More than 75 per cent coverage is seen in 18 States (Andhra Pradesh, Arunachal Pradesh, Chhattisgarh, Gujarat, Haryana, Jharkhand, Karnataka, Kerala, Madhya Pradesh, Maharashtra, Mizoram, Orissa, Punjab, Rajasthan, Sikkim, Tamil Nadu, Tripura, and Uttar Pradesh). This is mostly due to the promotion of the self-help groups and Anganwadi centres across the States for the upliftment of women groups. But it can be noted that in States of Assam, Bihar, Goa, Rajasthan and Uttarakhand coverage is between 50-75 per cent.

Status of Sanitation in Andhra Pradesh

As per the Report of the Department of Rural Water Supply and Sanitation in Andhra Pradesh, 60 per cent of the rural households

were covered with sanitation facilities by the end of the year 2009. Out of this majority had Individual Sanitary Latrines (66 per cent) outside their houses while 34 per cent had attached latrines. About 36 per cent of habitations have drainage facilities. Forty five

habitations are covered with solid waste management facilities in an unscientific way. Thirty two per cent of people are dumping in front of houses and 44 per cent are dumping on the road side (source: Progress Report of ENC and PD SWSM, 2009).

Table 3: TSC Achievements in Andhra Pradesh (up to 2009 March)

Component	Sanctioned	Achieved	Balance programme up to 2012	% Achievement
ISLs to BPL	65,21,091	39,39,689	25,81,402	60.41
ISLs to APL	36,29,688	17,28,680	19,01,008	47.62
School toilets	1,14,861	96,823	18,038	84.29
Anganwadi toilets	15,645	4,789	10,856	30.61
Sanitary complexes	575	443	132	77.04

Source : Project Director, SWSM, RWSS, GoAP 2009 (Please note that the online data and state report data differ slightly).

It can be inferred from the above Table that the percentage of achievement of ISLs to the total sanctioned ISLs for BPL families in Andhra Pradesh is around 60.41 (up to March, 2009) and a balance of 39.59 has to be achieved by 2012. The percentage of achievement of sanitary complexes is around 77.04 indicating a balance of only 22.96 to be achieved by 2012. But the Government has decided a slow down on the community complexes as O&M is becoming very difficult. In fact it was learnt from the district offices that they are dismantling the filled toilets as the communities are not managing them properly. The school toilet coverage is the highest (84.29 per cent) among all the components. The reasons for the success could be that the Education Department takes up the work and the school sanitation committees are formed for O&M and the special drive for girl child education which is linked to toilet construction etc. On the

contrary, the percentage of achievement under anganwadi toilets is only about 30.61 indicating no focus on this component. This might increase the morbidity rate among the children who attend the anganwadis. Further, the children are losing an opportunity to get themselves trained on sanitation and hygiene practices due to lack of facilities. Apart from these, the unit costs (₹ 25,000) provided for school toilets and anganwadi toilet complexes is much lower than actual costs (ranges between 40,000 to 50,000) which might be the reason for slow progress in many cases. The families whoever have constructed the ISLs with Government incentive (₹ 2500) had to invest their own money to ensure the quality of the structure. The toilets constructed with subsidy without awareness generation have been converted as storage room, bathroom, livestock/ fuelwood storage room etc. There is a need for a special drive for bringing awareness among both BPL and APL

households on the importance of hygiene and sanitation to avoid the unaccounted major expenditure on medical treatment to combat the diseases due to bad sanitation practices.

The progress across different districts of Andhra Pradesh across different components of sanitation is presented in Table 4.

Table 4 : Component-wise Progress of Sanitation in Andhra Pradesh (per cent)

S.No.	State/ District	IHL- BPL	IHL- APL	Total - IHL	Sanitary Complexes	School Toilets	Anganwadi
1	Adilabad	37.81	26.6	33.61	0	85.57	32.55
2	Anantapur	100	2.21	68.04	0	100	100
3	Chittoor	68.37	55.89	62.82	0	85.75	100
4	Kadapa	70.36	7.71	39.04	0	70.38	89.17
5	East Godavari	49.09	27.66	41.79	72	92.88	34.28
6	Guntur	51.57	17.18	35.67	0	67.21	62.33
7	Karimnagar	40.93	20.65	33.31	0	92	70.47
8	Khammam	64.68	100	65.57	0	100	62.38
9	Krishna	53.79	30.8	46.12	17.65	71.07	100
10	Kurnool	51.88	100	72.6	0	71.77	9.62
11	Mahabubnagar	40.5	100	89.31	100	86.47	39.78
12	Medak	57.18	31.21	51.05	6	48.64	26.43
13	Nalgonda	94.9	55.16	78.15	0	86.9	100
14	Nellore	53.23	4.01	36.51	0	80.87	14.11
15	Nizamabad	90.98	100	100	0	100	100
16	Prakasam	43.97	59.36	49.1	0	90.71	80.13
17	Rangareddy	57.85	49.78	55.81	0	93.24	68.09
18	Srikakulam	30.53	36.52	33.09	15	71.48	32.71
19	Visakhapatnam	59.47	19.47	44.18	10	100	0
20	Vizianagaram	71.14	62.06	66.35	50	100	8.03
21	Warangal	100	100	100	0	91.34	6.31
22	West Godavari	98.21	100	99.21	100	100	62.41
	Total	61.76	57.47	60.23	100	86.45	35.96

Source : www.ddws.nic.in dt: 01:01:2010.

Table 5 : Inter-district Comparison of Various TSC Components

Per cent of achievement	Total - IHHL	Sanitary Complexes	School Toilets	Anganwadi Toilets
Below 50%	Adilabad, Kadapa, East Godavari, Guntur, Karimnagar, Krishna, Nellore, Prakasam, Srikakulam and Visakhapatnam	Krishna, Srikakulam, Visakhapatnam, Vizianagaram, Medak 0% or No - Sanitary complexes in Adilabad, Anantapur, Chittoor, Kadapa, Guntur, Karimnagar, Khammam, Kurnool, Nalgonda, Nellore, Nizamabad, Prakasam and Rangareddy	Medak	Adilabad, East Godavari, Kurnool, Mahabubnagar, Medak, Nellore, Srikakulam, Vizianagaram and Warangal
50-75%	Anantapur, Chittoor, Khammam, Kurnool, Medak, Rangareddy and Vizianagaram	East Godavari	Kadapa, Guntur, Krishna, Kurnool and Srikakulam	Guntur, Khammam, Karimnagar, Rangareddy and West Godavari
Above 75%	Mahabubnagar, Nalgonda, West Godavari, Nizamabad (100%) and Warangal (100%)	West Godavari and Mahabubnagar	Adilabad, Anantapur, Chittoor, East Godavari, Karimnagar, Mahabubnagar, Nalgonda, Nellore, Nizamabad, Prakasam, Rangareddy and Warangal 100% - School toilets in Anantapur, Khammam, Visakhapatnam, Vizianagaram and West Godavari	Kadapa, Prakasam 100%- Anganwadi toilets in Anantapur, Chittoor, Krishna, Nalgonda and Nizamabad,

Source:ddws.nic.in

The inter – district comparison is done by classifying the percentage of achievements into three categories such as below 50 per cent, 50-75 per cent and above 75 per cent to indicate the forerunner districts in terms of their progress towards achieving total sanitation.

IHHL Coverage Status Across Andhra Pradesh: From the above Table it can be inferred that for physical achievements under different components of TSC when IHHL coverage across different districts in Andhra Pradesh is taken, districts of Adilabad, Kadapa, East Godavari, Guntur, Karimnagar, Krishna, Nellore, Prakasam, Srikakulam and Visakhapatnam have below 50 per cent coverage and Anantapur, Chittoor, Khammam, Kurnool, Medak, Rangareddy and Vizianagaram have the coverage ranging between 50-75 per cent and the districts of Nizamabad and Warangal have 100 per cent coverage and Mahabubnagar, Nalgonda and West Godavari have coverage above 75 per cent.

Sanitary Complexes Coverage Status Across Andhra Pradesh: There are no – sanitary complexes in Adilabad, Anantapur, Chittoor, Kadapa, Guntur, Karimnagar, Khammam, Kurnool, Nalgonda, Nellore, Nizamabad, Prakasam and Rangareddy districts of Andhra Pradesh and below 50 per cent coverage is seen in Krishna, Srikakulam, Visakhapatnam, Vizianagaram, and Medak. East Godavari is the only district which has coverage of about 72 per cent and it falls in the category of 50-75 per cent. West Godavari and Mahabubnagar have 100 per cent coverage of sanitary complexes in the districts which speaks in volumes about the community and the GP initiatives for a safe, clean and hygienic environment for the people.

School Toilets Coverage Status Across Andhra Pradesh: Medak (48.64 per cent) is the only district which has a coverage of below 50 per cent for school toilets construction. Kadapa, Guntur, Krishna, Kurnool and Srikakulam have coverage status percentage ranging between 50-75 per cent and districts of Adilabad,

Anantapur, Chittoor, East Godavari, Karimnagar, Mahabubnagar, Nalgonda, Nellore, Nizamabad, Prakasam, Rangareddy and Warangal have coverage above 75 per cent and Anantapur, Khammam, Visakhapatnam, Vizianagaram and West Godavari have 100 per cent coverage status for school toilets.

Anganwadi Toilets Coverage Status Across Andhra Pradesh: Adilabad, East Godavari, Kurnool, Mahabubnagar, Medak, Nellore, Srikakulam, Vizianagaram and Warangal have < 50 per cent and Anantapur, Chittoor, Krishna, Nalgonda and Nizamabad have 100% – anganwadi toilets. Guntur, Karimnagar, Khammam, Rangareddy and West Godavari have coverage between 50-75 per cent and Kadapa and Prakasam have > 75 per cent of coverage status.

The above findings show that the coverage is quite good but the real picture on the ground is something different which is represented in Box-2 from WASHCost research.

BOX-2: Access and Usage in Six Districts of Andhra Pradesh

As part of the WASHCost project, field survey was conducted in six districts of Andhra Pradesh and the findings revealed that the access to toilets is very low especially in the non-NGP villages. The coverage of toilets is quite low compared to the figure indicated in the above Tables. Further, even those households who own the toilets are not using the toilets which is quite evident from the percentage of open defecation. Open defecation in villages like Chennipad, Maliala, Kamkole, Machireddipally etc. is so alarming that reaching the coverage target of Millennium Development Goal seem to be very distant. Further, the usage in some villages despite having the toilets causes more concern and confirm the findings (Fig. 7) of low amounts spent on the IEC activities.

District	Village	% of HHs having IHHLs	% of open defecation
Ranga Reddy	Godamkunta (NGP)	89	12
	Munirabad (NGP)	88	9
	Ramdaspally	50	10
	Khanapur	76	22
	Tulekalan	42	62
Nalgonda	Bandasomaram (NGP)	79	22
	Malkapur (NGP)	73	15
	Gopalapuram	47	48
Mahabubnagar	Kistaram(NGP)	44	78
	Chennipad	9	90
Warangal	Gangadevipally (NGP)	88	0
	Maliala	13	88
	Pembarthi	30	70
Khammam	Mangalithanda	40	58
	Medipally (NGP)	91	8
	Jagannadhapuram (NGP)	84	17
	Venkatapuram	76	20
Medak	Kamkole	11	89
	Machireddipally	16	86
	Enkepally	37	65

Source : WASHCost Survey 2010.

Challenges for Total Sanitation Campaign (TSC)

As seen from the above discussions it can be noted that achieving total sanitation is a very complex problem and there are various types of constraints to implement the programme. It is important that policymakers and implementors need to strictly adhere to programme principles when planning and implementing the strategies to solve the sanitation problems. As identified by Lenton

et al. (2005) as well as Tipping *et al.* (2005), the problems with governance are one of the main impediments of sanitation sector. The ever-changing political system makes it challenging to create a lasting progress especially since the investments may not yield results during one term (Lenton *et al.*, 2005). The major challenges observed are:

- * Sanitation coverage across all the TSC components is low, and reaching TSC targets by year 2012 is difficult.

- * There are huge variations across the States in reaching the targets indicating that there is no cross learning and sharing between the States on how to take this agenda forward. Similar results are found across the districts within the State of Andhra Pradesh.
- * Though TSC allocated huge amounts for Information, Communication, Education (IEC) and start up activities, the amounts have not been spent reflecting the low priority given to the software against the hardware components.
- * The allocated amounts for building the ISLs and school sanitation blocks and anganwadi complexes were perceived very low (actual costs Vs unit costs) and ensuring the quality is a major challenge using these unit costs. Further, the allocations for sanitation were declining from Central Government budgets.
- * The funds for drainages and solid disposal are either limited or non-existent at the Panchayat level making the sanitation incomplete and difficult to cover.
- * Generating awareness and building the capacities of local institutions on the Operation and Maintenance and monitoring the sanitation behaviour change are perceived as a major challenge. Further, the department does not have specialised staff/ experts for undertaking these promotion campaigns and trainings.
- * Village Water and Sanitation Committees (VWSC) do not exist in the villages and the water and sanitation component is given least priority by the Panchayat.
- * To achieve TSC targets various departments are brought in, but inter - departmental coordination among the implementing agencies is completely lacking leading to less coverage as many of these activities are interlinked and require a sequence in implementation.
- * The staff vacancy in the department is very high and given the workload it is very difficult to focus on the sanitation where they are trained more for technical engineering rather than the social engineering which is essential to reach the sanitation coverage.

Conclusions and Way Forward

Proper sanitation is the basis of a healthy environment. For reaching the Millennium Development Goal of "Halve, by 2015, the proportion of people without sustainable access to safe drinking-water and basic sanitation", the Government should take proper initiatives to make people aware about the impact of improper sanitation on the environment and should make some emergency programme to achieve the Millennium Development Sanitation Goal.

Since usage is the major issue than coverage, the Government should take proper steps for demand generation through Mass Awareness Campaigns using the local media, mobile networks and creative advertisements, keeping the principles of human dignity, quality of life, shame and fame and finally the environmental security at household and community level as central focus. For taking the TSC in a mission mode, efforts have to be made in establishing the Village Water and Sanitation Committees (VWSC) and the Panchayats have to be strengthened using the Non-Governmental Organisations or local resource persons or centres. Further, behaviour change messages have to be disseminated across various stakeholder groups by making individual household contacts and also by using the local bodies or community based organisations such as Self-Help Groups (SHGs),

Rythu Mitra groups etc. For undertaking these activities the Department should hire specialised staff by providing necessary facilities like transport and audio-visual material to disseminate the messages effectively. Further, for any programme to be successful there needs to be a continuous monitoring and learning. The NGP villages and the households which have constructed the toilets need to be monitored for a certain period of time to stabilise the behaviour change. Department must take initiatives in this direction and accelerate the monitoring process by hiring additional staff which is very crucial. The District Water and Sanitation Mission has to be rehabilitated and their functioning may be initiated on the model of Water and Sanitation Management Organisation (WASMO) in Gujarat and Tamil Nadu Water and Drainage (TWAD) Board in Tamil Nadu.

Further, massive programmes like TSC require community support and involvement is essential, hence it is critical to build the vision of the community beyond construction and towards ownership and management. The communities need to build their capacities towards good governance, operation and minor repair management, systems for generating the income at community level in the form of user charges etc. The community should take active responsibility in solid and liquid disposal systems following the slopes and contour lines etc. Further, the funds need to be allocated for undertaking the drainage systems in a systematic manner. For effective implementation of TSC there is an urgent need for convergence and sequence of activities, i.e. "demand generation" followed by "fund disbursal" followed by "regular monitoring" for ensuring effective results in sanitation behaviour adoption at household, school and community levels.

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